Saint Louis University
Electrical and Computer Engineering Department
COMPUTER ENGINEERING FLOW CHART

Name:_____ Student #:_____ First Semester:_____

Freshman			
ECE 1001 Introduction to ECE I	1	ECE 1002 Introduction to ECE II	1
CHEM 1110 General Chemistry I	3	CSCI 1300 Intro to OOP (MATH 1200)	4
CHEM 1115 General Chemistry Lab (co-CHEM 1110)	1	MATH 1660 Discrete Math (MATH 1200)	3
ENGL 1920 Adv Writing for Professionals[1]	3	MATH 1520 Calculus II (MATH 1510)	4
MATH 1510 Calculus I	4	PHYS 1610 Engr Physics I (MATH 1510)	3
THEO 1000 Theological Foundations	3	PHYS 1620 Engr Physics I Lab (co-PHYS 1610)	1
	15		16
Sophomore			
ECE 2101 Electrical Circ I (MATH 1520, PHYS 1610)	3	CSCI 2100 Data Struct (CSCI 1300, co-MATH 1660)	4
ECE 2205 Digital Design	3	ECE 2102 Electrical Circuits II (ECE 2101)	3
ECE 2206 Digital Design Lab (co-ECE 2205)	1	ECE 2103 Electrical Circuits Lab (co-ECE 2102)	1
MATH 2530 Calculus III (MATH 1520)	4	MATH 3110 Linear Algebra (MATH 1520)	3
PHYS 1630 Engr Physics II	3	MATH 3550 Differential Eq. (MATH 2530)	3
PHYS 1640 Engr Physics II Lab (co-PHYS 1630)	1	Core: Humanities[2]	3
	15		17
Junior			
CSCI 2300 OO Software Design (CSCI 2100)	3	ECE 3052 Prob & RV Engr (MATH 2530, prog[7])	3
ECE 3130 Semiconductors (ECE 2102, MATH 3550)	3	ECE 3090 Junior Design (ECE 3150)	1
ECE 3150 Linear Systems (ECE 2102, MATH 3550)	3	ECE 3131 Electronic Circuits (ECE 3130)	3
ECE 3151 Linear Systems Lab (co-ECE 3150, prog[7])	1	ECE 3132 Electronic Circuits Lab (co-ECE 3131)	1
ECE 3225 Microprocessors (prog[7])	3	ECE 3215 Computer System Design	3
ECE 3226 Microprocessors Lab (co-ECE 3225)	1	ECE 3216 Computer System Lab (co-ECE 3215)	1
ECE 3205 Advanced Digital Design (ECE 2205)	3	ECE 3217 Computer Arch (CSCI 1300, MATH 1660)	3
	17		15
Senior			
ECE 4800 Senior Design I[6]	3	ECE 4810 Senior Design II (ECE 4800)	3
CSCI 3500 Operating Sys (ECE 3217, CSCI 2100)	3	ECE 4245 Computer Networks (CSCI 3500)	3
ECE/CSCI Elective[3]	3	ECE/CSCI Elective[3]	3
PHIL 3400 Ethics & Engineering	3	Core: Cultural Diversity[2]	3
Core: Social & Behavioral Science[4]	3	Technical Elective[5]	3
	15		15

Total Hours: 125

[1] Students needing prerequisite work in writing skills as determined by ACT or SAT scores will be required to take ENGL 1500: the Process of composition (3) and perhaps ENGL 1040 Accelerated Reading
[2] Must not be used to satisfy another core requirement.
[3] Must be taken from an approved list of engineering or CSCI elective courses.
[4] Must be taken from an approved list of Social and Behavioral Science courses (including Economics).
[5] Must be selected from courses in science, math, or engineering at the 2000 level or higher, or Computer Science at 3000 level or higher.
[6] REQUIRES SENIOR STANDING (all required technical courses through the junior year have been completed and passed)
[7] Prerequisite requirement of computer programming, either CSCI 1060, CSCI 1300, or BME 2000